

REMARKS

Objection to new matter in specification

The office action cited an amendment filed 7 December 1998 as introducing new matter into the specification. Although this amendment made two minor changes in the specification, it did not introduce the language objected to in this office action. Such language was inserted by amendment in Claim 86, however, and has been removed by the current amendment, which now expresses Claim 86 in the original specification language appearing on page 7, lines 17-19. This amendment makes the new matter rejection moot without requiring any change to the specification.

Claim rejections – 35 USC 112

Claims 12-25 and 39-90 are all rejected for various clarity problems listed in the office action. Each of the mentioned problems has been dealt with by this amendment, and other claims having similar problems to the ones mentioned have also been amended so that all the claims presently presented are believed to be concise and clear within the requirements of 35 USC 112.

Allowable subject matter

Claims 1-11 have been allowed and are unchanged in this response. The clarity amendments mentioned above can now result in allowance of claims 53-60 and 86-90, which are not rejected cited on art.

Many dependent claims were also recognized as allowable if amended for clarity, and such amendments have been made. The dependent claims have not been rewritten to include subject matter of parent claims, though, because applicant's attorney believes that other amendments responsive to cited art have made parent claims allowable as well. For any question on this, the examiner is asked to call applicant's attorney so that for any unresolved issues of allowability of parent claims, applicants can rewrite allowable dependent claims to include parent subject matter.

Claim rejections – 35 USC 102

Claim 39 and many of its dependent claims were rejected as anticipated by Osten, which was said to suggest an "integral" shoe. Amendments to claim 39 now require that an extruded sash shoe extend "in a single extruded piece" between a hook-shaped upper region and a platform-shaped lower region. In contrast to this, Osten suggests a pivoting shoe platform formed of one piece, and a separate connecting hook piece reaching to a counterbalance. Osten also does not teach extrusion as a way of forming either piece, and Osten teaches away from forming a sash platform and a hook-shaped upper region in a single extruded piece.

Claim 39 also is amended to require that the sash support arm engage the platform-shaped lower region of the shoe "when the sash support arm is outwardly extended and to drop to a downwardly dependent position when the sash support arm does not engage the platform-shaped lower region." Osten teaches against this by suggesting sash support arms that are biased outward by compression springs 56 and therefore do not drop to downwardly dependent positions when they do not engage a shoe platform. The Osten sash support arms are biased to their full outwardly extending positions even when they are lifted above shoe platforms and are not engaging shoe platforms. If such sash support arms were not biased outward, as Osten suggests, they would not automatically engage sash platforms when a sash is lowered into position between a pair of shoes. Having sash support arms that drop to downwardly dependent positions, as claimed, would make the Osten system practically unworkable.

These distinctions justify withdrawal of the rejection of claim 39 under 35 USC 102, and allowance of claims 39-52.

Claims 74-85 were rejected under 35 USC 102 as anticipated by Osten. These claims have been amended for improved clarity to show distinctions from the Osten teaching. Each of these claims offers two important distinctions from Osten. In slightly different language, each claim defines a vertical relationship between a sash support region and a counterbalance lifting region for the sash shoes. In other words, the sash weight borne by the shoes is arranged vertically below the counterbalance uplifting force applied to the shoes, "to minimize any moment arms tending to turn the shoes around horizontal axes." Osten teaches directly against any such minimizing of moment arms tending to turn the shoes around horizontal axes. In

contrast to the claimed language, Osten requires that the sash weight transmitted via the sash support arms creates a moment arm that is deliberately off-set from the counterbalance uplifting region to pivot the shoe platforms counterclockwise as viewed in Osten FIG. 1. Without the moment arm produced by the Osten sash weight resting on the pivotal shoe platforms, these would pivot clockwise to locking positions as shown in FIG. 4. If Osten were restructured to minimize moment arms tending to turn the shoes around horizontal axes as claimed, then the Osten platforms could not be relied upon to pivot out of locking positions when supporting sash weight, and this would make the Osten system inoperable. The minimizing of any moment arms tending to turn shoes around horizontal axes thus has a significant structural difference from the Osten teaching and allows the Osten rejection of claims 74-85 to be withdrawn.

Another limitation in claims 74-85 involves the way sash support arms hang downwardly or move to downwardly hanging positions upon lifting the sash weight from the shoes. Osten teaches directly against this by suggesting sash support arms that are biased outward by compression springs 56. Lifting the Osten sash weight upward so that the Osten sash support arms no longer rest on the Osten shoe platforms does not result in the Osten sash support arms hanging downward or moving to downwardly hanging positions, as claimed. Instead, the compression springs keep the Osten support arms biased to their fully outward extending positions, which is necessary for such support arms to engage the sash platforms when the Osten sash is lowered onto the sash shoes. This structural distinction also justifies withdrawal of the 35 USC 102 rejection of claims 74-85 on Osten.

Claim rejections – 35 USC 103

Claim 12 and many of its dependent claims were rejected as obvious from Osten in view of Haas. Claim 12, and several of its dependent claims have been amended to improve the clarity of the subject matter distinctions from Osten and Haas.

Claim 12 previously required that sash shoes be formed of a metal extrusion extending “integrally” between a hook-shaped upper region and an L-shaped lower platform region. The word “integrally” was used in this context to mean single-piece construction, but the office action argues that “integrally” applies to multi-piece construction. The intended meaning of the claimed subject matter is now specified by requiring that the configuration of the extrusion

profile of the sash shoes extend “in a single piece of the pre-determined extrusion profile from” a hook-shaped upper region to an L-shaped platform region. Neither Osten nor Haas suggest any such single-piece construction; nor do these references suggest an extrusion by which such a single-piece construction could be made. Moreover, making either the Osten or Haas shoe of a single-piece construction would disable the teaching of each respective reference, which require separately pivoting locking pieces used as shoe platforms. A shoe platform formed as a single piece extrusion unified with a hook-shaped lifting region would not allow the platform to pivot and would therefore not allow any pivoted locking system, which would defeat the teachings of both Osten and Haas. This warrants withdrawal of the rejection of claim 12.

The locking elements defined in claim 16 are not part of a shoe platform as the Osten and Haas references require. The separate locking elements of claim 16 are possible on the claimed extruded shoe that extends in a single piece from the platform to the upper region, but the Osten and Haas shoes, which require pivoting sash platforms, preclude this. The fact that Westfall suggests lances in a jamb is not sufficient to lead an ordinary worker into departing from the Osten and Haas teachings of pivoting platform elements accomplishing shoe locking.

The Johnson lock, as applied in the rejection of claim 17, is not a pivoting portion of a shoe platform as required by the Osten and Haas teachings. It is a spring-biased locking element that must be manually released to raise a sash, and it is not for holding a sash in place while it is laterally removed, as required by the claims. Johnson also does not suggest any single-piece shoe extrusion that could carry a locking element. Ordinary workers following Osten and Haas would stay with sash platform actuated locking elements, rather than with the manually releasable locking element proposed by Johnson, and would have no guidance from any of the three references for making a sash shoe extrusion extending in a single piece from a hook-shaped upper region to a platform-shaped lower region.

These distinctions make it unobvious to an ordinary worker of any way to maneuver from the cited references to the subject matter claimed so that the rejection of claims 12-25 warrants withdrawal.

Claims 61, 64, and 65 were rejected under 35 USC 103 as obvious from Osten in view of Westfall. Claim 61 has been amended to clarify its distinctions from these references. The

amendments include the requirement that the shoe hooks are arranged below the sash supporting platforms so that the hooks can move between latched and unlatched positions while a sash is supported on the platforms. This is not possible in the Osten teaching in which the sash platforms are also the locking elements; nor is it possible in the Westfall reference whose hooks are not pivotally mounted and are not arranged below the sash platforms.

Amended claim 61 also clarifies that the hooks hang dependently downward from the shoes below the sash supporting platforms, which is not possible with the Osten system, and is not true of the Westfall reference, which does not suggest pivotally mounted hooks or hooks hanging dependently downward below sash supporting platforms.

These clarified distinctions from Osten and Haas can result in withdrawal of the rejection of claims 61-66.

CONCLUSION

For the reasons explained above, applicant's attorney believes that all the claims remaining in the application are now ready for allowance. For any question on this, or as a prerequisite to any action other than allowance, the examiner is asked to call applicant's attorney for a telephone interview to deal with any remaining questions of patentability.

Expeditious handling

Applicant's attorney has called the examiner, Gregory Strimbu, and asked that this application be processed expeditiously because of the existence of a direct infringer of allowed claims, and because the application has been pending for over seven years. To help facilitate this, applicant's attorney is filing this response by facsimile as quickly as possible, and Examiner Strimbu has agreed to deal with this response expeditiously when it reaches his desk. Also, as mentioned above, applicant's attorney requests a telephone interview before issuance of any further office action other than allowance. Cooperation by Examiner Strimbu is greatly appreciated.

"Recognizing that Internet communications are not secured, I hereby authorize the PTO to communicate with me concerning any subject matter of this application by electronic mail. I understand that a copy of these communications will be made of record in the application file."

Respectfully Submitted:
William P. Newton et al.

By: Eugene Stephens
Eugene Stephens, Registration No.: 20,649
Attorney for Applicant

2 Sept 04
Date:

BROWN & MICHAELS, P.C.
400 M&T Bank Building - 118 N. Tioga St.
Ithaca, NY 14850
(585) 232-7700 • (585) 232-7188 (fax)
e-mail: stephens@bpmlegal.com